

Lloyd's Register of Shipping

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index. No. 17332
(For London Office only).No
418

Ship's Name 'MINASLOIDE'	Official Number	Nationality and Port of Registry Brazilian. Rio de Janeiro	Gross Tonnage 5702	Date of Build 1904 - II	Port of Survey Rio de Janeiro
Moulded Dimensions: Length 420'.7 Breadth 53.83' Depth 31.75'					Date of Survey 9/1/47
Moulded displacement at moulded draught = 85 per cent. of moulded depth tons					Surveyor's Signature M. Caldwell
Coefficient of fineness for use with Tables assumed .77					Particulars of Classification 100 AI <i>Shelter deck with freeboard</i>

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... 31.75'	(a) Where D is greater than Table depth (D - Table depth) R = (31.81 - 28.05) 3.76	Moulded Breadth (B) 53.83'
Stringer plate06'	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = ✓	Standard Round of Beam = $\frac{B \times 12}{50} = \mathbf{12.92''}$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$		Ship's Round of Beam = 13''
Depth for Freeboard (D) = 31.81'	If restricted by superstructures ✓	Difference .08'
		Restricted to ✓
		Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right) = \mathbf{\frac{.08}{4} \times .0238 = .0048''}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	40.0'	40.00	7.96	✓	40.00
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Combd. Bridge enclosed ...	360.7'	360.70	7.96	✓	360.70
" overhang aft ...					
" overhang forward					
F'cle enclosed ...					
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...	20.0'	10.00	1/2 DIFF.		10.00
" forward					
Total ...	420.70	410.70			410.70

Standard Height of Superstructure **7.50'**

 " R.Q.D. **✓**

Deduction for complete superstructure **42.00''**

Percentage covered $\frac{S}{L} = 100$ ✓

 " $\frac{S_1}{L} =$ **97.62** ✓

 " $\frac{E}{L} =$

Percentage from Table, Line A.
(corrected for absence of forecastle (if required)) **97.07** ✓

Percentage from Table, Line B.
(corrected for absence of forecastle (if required)) **✓**

Interpolation for bridge less than 2L (if required) **✓**

Deduction = **42.00 × .9707 = -40.77''** ✓

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	52.07	1		52.07	45.75	51.25	1		51.25
1/4 L from A.P. ...	23.17	4		92.68	16.50	22.81	4		91.24
1/2 L " ...	5.725	2		11.45	1.00	5.64	2		11.28
Amidships ...	-	4		-	-	-	4		-
3/4 L from F.P. ...	11.455	2		22.91	15.00	14.60	2		29.20
3/4 L " ...	46.34	4		185.36	51.00	59.07	4		236.28
F.P. ...	104.14	1		104.14	127.25	132.75	1		132.75
Total ...				468.61					552.00

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \mathbf{\frac{83.39-.75-.50}{18} = -1.16''}$

If limited on account of midship superstructure. **✓**

Mean actual sheer aft = **Deficient**
Mean standard sheer aft **greater than 75%**

Mean actual sheer forward = **Excess**
Mean standard sheer forward

Length of enclosed superstructure forward of amidships =

 " aft of " =

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **31.81'**

Summer freeboard = **4.37'**

Moulded draught (d) = **27.44'**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = **6.86 × 6 3/4**Addition for Winter North Atlantic Freeboard (if required) = **✓**

Deduction for Fresh Water.

Displacement in salt water at summer load water line

Δ =

Tons per inch immersion at summer load water line

T =

Deduction = $\frac{\Delta}{40T}$ inches**d/4 = 6 3/4**

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{.77+.68}{1.36} = \mathbf{1.45}$ **1.36**Depth Correction ... **11.28**Deduction for superstructures ... **40.77**Sheer correction ... **1.16**

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

78.02''**83.18''****11.28****40.77****1.16****11.2841.93****-30.65****Summer Freeboard = 52.53**SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, **Wood, Steel, Deck**

Tropical Fresh Water Line above Centre of Disc ...	13 1/2
Fresh Water Line " " ...	6 3/4
Tropical Line " " ...	6 3/4
Winter Line below " " ...	6 3/4
Winter North Atlantic Line " " ...	✓

Tropical Fresh Water Freeboard	3'-5"
Fresh Water	3'-9 3/4"
Tropical	3'-9 3/4"
Winter	4'-11 1/4"
Winter North Atlantic	✓

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

Trade of ship

Foreign

Names of sister ships

Builder's name and yard number

Owners

Lloyd Brasileiro

Fee Cr\$ 3.000,00

Trav. Exp. 200,00.



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Foundation